## **EAST Search History**

## EAST Search History (Prior Art)

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	"2008019133"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:50
L2	2	"20080019133"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:50
L12	8	("3877052" "4249967" "5798536" "3593055" "6177761").pn. "20010010449" "20020141006"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:55
L13	1	"20080247169"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:57
L14	2	"20050162849"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:58
L15	2	"20040119083" "20040032728"	US-PGPUB; USPAT	OR	ON	2009/12/16 08:59
L16	102	"5813752"	US-PGPUB; USPAT	OR	ON	2009/12/16 09:00
L17	0	"2006175626"	US-PGPUB; USPAT	OR	ON	2009/12/16 09:01
L18	2	"20060175626"	US-PGPUB; USPAT	OR	ON	2009/12/16 09:01
L19	1450	313/113.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/16 09:33
L20	189	19 and ((light with diode) LED)	US-PGPUB; USPAT	OR	ON	2009/12/16 09:33
L24	30	313/114.ccls. and ((light with diode) LED)	US-PGPUB; USPAT	OR	ON	2009/12/16 10:21
S1	0	10/585456	US-PGPUB; USPAT	OR	ON	2009/05/13 10:52
S2	0	"10585456"	US-PGPUB; USPAT	OR	ON	2009/05/13 10:52
S3	61	((TADASHI) near2 (YANO)).INV.	US-PGPUB; USPAT	OR	ON	2009/05/13 14:03
S4	83	((MASANORI) near2 (SHIMIZU)). INV.	US-PGPUB; USPAT	OR	ON	2009/05/13 14:03
S5	192	((KIYOSHI) near2 (TAKAHASHI)). INV.	US-PGPUB; USPAT	OR	ON	2009/05/13 14:03
S6	6	S3 and S4 and S5	US-PGPUB; USPAT	OR	ON	2009/05/13 14:04

<b>S</b> 7	20		US-PGPUB; USPAT; USOCR	OR	ON	2009/05/13 14:05
<b>S</b> 8	10	· ·	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/13 14:15
S9	2	"20060131594"	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/13 14:16
S10	191	"6576930" "7005679" "3875456"	US-PGPUB; USPAT	OR	ON	2009/05/13 14:21
S11	3	"6576930".pn. "7005679".pn. "3875456".pn.	US-PGPUB; USPAT	OR	ON	2009/05/13 14:21
S13	893	313/498.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/13 15:01
S14	456	313/502.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/13 15:19
S15	1707	313/512.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/13 15:23
S16	82364	"12" and (hemispheric\$2 semispheric \$2 (half near2 (circle sphere)) semi \$spheric semi\$spherical)	US-PGPUB; USPAT	OR	ON	2009/05/14 07:26
S17	135	(313/498.ccls. 313/502.ccls. 313/406.ccls. 313/512.ccls.) and (hemispheric\$2 semispheric\$2 (half near2 (circle sphere)) semi\$spheric semi\$spherical)	US-PGPUB; USPAT	OR	ON	2009/05/14 07:26
S18	122	S17 and (transmiss\$3 transmittance reflect\$4)	US-PGPUB; USPAT	OR	ON	2009/05/14 07:28
S19	118	LED and columnated	US-PGPUB; USPAT	OR	ON	2009/05/14 08:24
S20	8191	LED and "surface treatment"	US-PGPUB; USPAT	OR	ON	2009/05/14 08:27
S21	166	S20 and "313" clas.	US-PGPUB; USPAT	OR	ON	2009/05/14 08:28
S22	27	"6686691"	US-PGPUB; USPAT	OR	ON	2009/05/14 08:41
S23	О	2-86154	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/05/14 09:13
S24	55	"286154"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/05/14 09:13

S25	47	"5055892"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2009/05/14 09:20
S26	45	"5055892"	US-PGPUB; USPAT	OR	ON	2009/05/14 09:21
S27	88	(313/498.ccls. 313/502.ccls. 313/406.ccls. 313/512.ccls.) and (hemispheric\$2)	US-PGPUB; USPAT	OR	ON	2009/05/14 09:55
S28	5957	LED and (hemispheric\$2)	US-PGPUB; USPAT	OR	ON	2009/05/14 10:01
S29	538	S28 and phosphor	US-PGPUB; USPAT	OR	ON	2009/05/14 10:01
S30	61	("20020123164"   "20020172354"   "20030006418"   "20030067758"   "20030153861"   "20030173575"   "4042552"   "4107238"   "4141941"   "4320268"   "4562018"   "4826424"   "4918497"   "4966862"   "5027168"   "5087949"   "5110278"   "5143660"   "5210051"   "5277840"   "5338944"   "5374668"   "5393993"   "5416342"   "5477430"   "5523589"   "5604135"   "5631190"   "5669486"   "5739554"   "5753730"   "5813753"   "5851063"   "5858278"   "5882553"   "5912477"   "5959316"   "5968422"   "6066861"   "6069440"   "6120600"   "6156242"   "6177688"   "6187606"   "6201262"   "6252254"   "6329676"   "6346973"   "6373188"   "6383417"   "6391231"   "6404125"   "6521915"   "6576930"   "6734465"   "6744077"   "6853131"). PN. OR ("7029935"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/14
S31	268	362/300.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/14 10:53
S32	1509	362/293.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/14 10:55
S33	135	(313/498.ccls. 313/502.ccls. 313/406.ccls. 313/512.ccls.) and (hemispheric\$2 semispheric\$2 (half near2 (circle sphere)) semi\$spheric semi\$spherical)	US-PGPUB; USPAT	OR	ON	2009/05/15 10:54
S34	130170	LED and (side sideways) and reflect \$3	US-PGPUB; USPAT	OR	ON	2009/05/15 11:33
S35	2217	S34 and "313".clas.	US-PGPUB; USPAT	OR	ON	2009/05/15 11:34
S36	26142	LED and ((side sideways) with light) same reflect\$3	US-PGPUB; USPAT	OR	ON	2009/05/15 11:34
S37	893	S36 and "313".clas.	US-PGPUB; USPAT	OR	ON	2009/05/15 11:34
S38	336	LED and (sideways with light) same reflect\$3	US-PGPUB; USPAT	OR	ON	2009/05/15 11:43

S39	37	S38 and hemisphere	US-PGPUB; USPAT	OR	ON	2009/05/15 11:43
S40	864	light with out with LED with side	US-PGPUB; USPAT	OR	ON	2009/05/15 13:56
S41	1452	light with out with (LED chip diode) with side	US-PGPUB; USPAT	OR	ON	2009/05/15 13:56
S42	70	S41 and "313".clas.	US-PGPUB; USPAT	OR	ON	2009/05/15 13:57
S43	1382	S41 not "313".clas.	US-PGPUB; USPAT	OR	ON	2009/05/15 14:01
S44	27	("5128843"   "5604480"   "5632551"   "5966393") PN. OR ("6404131").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:11
S45	37384	(diode chip LED) and encapsul\$5 and reflect\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:38
S46	17231	S45 and column\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:39
S47	1768	S46 and ((side with (diode chip LED)) or sideways)	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:39
S48	331652	"36" and ray	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:40
S49	503898	"25" and ray	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:40
<b>S</b> 50	672	S47 and ray	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:40
S51	704	side\$4 with emit\$4 with diode with lamp	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:49
S52	28	(side\$4 with emit\$4 with diode with lamp).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/15 14:50
S53	2969	313/498.ccls. 313/502.ccls. 313/406. ccls. 313/512.ccls.	US-PGPUB; USPAT	OR	ON	2009/05/15 14:52
S54	5	(LI near2 JUI-TUAN).in.	US-PGPUB; USPAT	OR	ON	2009/05/15 15:36
<b>S5</b> 5	1196	257/100.ccls.	US-PGPUB; USPAT	OR	ON	2009/11/20 21:33
S56	1	"10585456"	US-PGPUB; USPAT	OR	ON	2009/11/21 12:43
S57	12481	313/498-512.ccls.	US-PGPUB; USPAT	OR	ON	2009/11/21 12:45
S58	293	S57 and @ay<"1980"	US-PGPUB; USPAT	OR	ON	2009/11/21 12:46
S59	1171	257/704.ccls.	US-PGPUB; USPAT	OR	ON	2009/11/21 12:53
S60	0	257/787-796.clss.	US-PGPUB; USPAT	OR	ON	2009/11/21 12:55
S61	4381	257/787-796.ccls.	US-PGPUB; USPAT	OR	ON	2009/11/21 12:55
S62	57	S61 and (reflect\$3 with (encapsula \$5 seal\$3))	US-PGPUB; USPAT	OR	ON	2009/11/21 12:56
S63	45	("3458779"   "3501676"   "3510732"   "3596136").PN. OR ("3805347").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/11/21 13:03

S64	302	, , , , , , , , , , , , , , , , , , , ,	US-PGPUB; USPAT	OR	ON	2009/11/23 08:56
S65	13	"10638579"	US-PGPUB; USPAT	OR	ON	2009/11/23 13:47
S66	34	JP-2000294701-\$.DID. OR US-2052902-\$.DID. OR US-1412380-\$. DID. OR US-4886709-\$.DID. OR US-5117281-\$.DID. OR US-5122781-\$. DID. OR US-5140220-\$.DID. OR US-5482898-\$.DID. OR US-5485037-\$. DID. OR US-5581876-\$.DID. OR US-5725808-\$.DID. OR US-5745624-\$. DID. OR US-5847935-\$.DID. OR US-5857767-\$.DID. OR US-5953203-\$. DID. OR US-5977567-\$.DID. OR US-6045240-\$.DID. OR US-6220722-\$. DID. OR US-6325524-\$.DID. OR US-6376268-\$.DID. OR US-6483623-\$. DID. OR US-6455930-\$.DID. OR US-6480389-\$.DID. OR US-6483623-\$. DID. OR US-6518502-\$.DID. OR US-6634750-\$.DID. OR US-6634770-\$. DID. OR US-6692252-\$.DID. OR US-2002004251-\$.DID. OR US-200200175621-\$.DID. OR US-20020176250-\$.DID. OR US-20020176250-\$.DID. OR US-20030057421-\$.DID. OR US-20040026706-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/11/23
S67	5	US-5847935-\$.DID. OR US- 20020135039-\$.DID. OR US- 20030189830-\$.DID. OR US- 6727643-\$.DID. OR US- 20040223315-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/11/23 14:00
S68	57	US-3711789-\$.DID. OR US-4902567-\$.DID. OR US-5441774-\$.DID. OR US-5674554-\$.DID. OR US-5841244-\$.DID. OR US-5908155-\$.DID. OR US-5959316-\$.DID. OR US-5908155-\$.DID. OR US-6066861-\$.DID. OR US-6066861-\$.DID. OR US-6066861-\$.DID. OR US-624216-\$.DID. OR US-6245259-\$.DID. OR US-6259846-\$.DID. OR US-6277301-\$.DID. OR US-6417019-\$.DID. OR US-6576488-\$.DID. OR US-6517218-\$.DID. OR US-6576488-\$.DID. OR US-6576930-\$.DID. OR US-6613247-\$.DID. OR US-6614179-\$.DID. OR US-6608332-\$.DID. OR US-661179-\$.DID. OR US-662948-\$.DID. OR US-6627115-\$.DID. OR US-6630691-\$.DID. OR US-6682207-\$.DID. OR US-6734465-\$.DID. OR US-6793374-\$.DID. OR US-6812500-\$.DID. OR US-6827469-\$.DID. OR	US-PGPUB; USPAT	OR	ON	2009/11/23

		US-6831302-\$.DID. OR US-6833669-\$.DID. OR US-6874910-\$.DID. OR US-6885035-\$.DID. OR US-6943380-\$.DID. OR US-6964877-\$.DID. OR US-6982829-\$.DID. OR US-7033060-\$.DID. OR US-7095053-\$.DID. OR US-7098483-\$.DID. OR US-7235189-\$.DID. OR US-7276736-\$.DID. OR US-20030010993-\$.DID. OR US-20030010993-\$.DID. OR US-20030025485-\$.DID. OR US-20030077385-\$.DID. OR US-20050088625-\$.DID. OR US-20050189557-\$.DID. OR US-2006006405-\$.DID. OR US-20060105484-\$.DID. OR DE-01021998-\$.DID. OR DE-01021998-\$.DID. OR EP-0936682-\$.DID. OR EP-0936682-\$.DID. OR EP-09110. OR EP-07052000-\$.DID. OR EP-1221724-\$.DID. OR EP-07052000-\$.DID. OR EP-1221724-\$.DID. OR EP-07102002-\$.DID. OR JP-10012926-\$.DID. OR JP-01161998-\$.DID. OR WO-9750132-\$.DID. OR WO-9805078-\$.DID. OR WO-9812757-\$.DID. OR				
S69	1	•	US-PGPUB; USPAT	OR	ON	2009/11/23 14:12
S70	2	"20030201451"	US-PGPUB; USPAT	OR	ON	2009/11/23 14:13
S71	4	US-6866394-\$.DID. OR US-6791119- \$.DID. OR US-20050270666-\$.DID. OR US-20050168147-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/11/23 14:14
S72	4	US-6137224-\$.DID. OR US-5235347- \$.DID. OR US-6498355-\$.DID. OR US-20030156608-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/11/23 14:16
S73	50	"5907151" "7015514"	US-PGPUB; USPAT	OR	ON	2009/11/23 14:19
S74	214	"20030189830" "6809342" "5136483"	US-PGPUB; USPAT	OR	ON	2009/11/23 14:23
S75	3	"20030189830" "6809342".pn. "5136483".pn.	US-PGPUB; USPAT	OR	ON	2009/11/23 14:23
S76	192	"5136483" "20020084749"	US-PGPUB; USPAT	OR	ON	2009/11/23 14:27
S77	2	"5136483".pn. "20020084749"	US-PGPUB; USPAT	OR	ON	2009/11/23 14:27

S78	54	US-1711478-\$.DID. OR US-3427447-\$.DID. OR US-3736427-\$.DID. OR US-2504611-\$.DID. OR US-3760237-\$.DID. OR US-4050775-\$.DID. OR US-3591728-\$.DID. OR US-4092705-\$.DID. OR US-4241382-\$.DID. OR US-121980D-\$.DID. OR US-4603496-\$.DID. OR US-4654758-\$.DID. OR US-4712163-\$.DID. OR US-4743094-\$.DID. OR US-3591773-\$.DID. OR US-4712163-\$.DID. OR US-4743094-\$.DID. OR US-3591773-\$.DID. OR US-5406462-\$.DID. OR US-5509095-\$.DID. OR US-5509095-\$.DID. OR US-5541746-\$.DID. OR US-574328-\$.DID. OR US-5695277-\$.DID. OR US-5847507-\$.DID. OR US-5912741-\$.DID. OR US-598925-\$.DID. OR US-6084250-\$.DID. OR US-6155699-\$.DID. OR US-6161946-\$.DID. OR US-6204523-\$.DID. OR US-6236514-\$.DID. OR US-6332688-\$.DID. OR US-6255670-\$.DID. OR US-6294800-\$.DID. OR US-6332688-\$.DID. OR US-6555670-\$.DID. OR US-6357889-\$.DID. OR US-621298-\$.DID. OR US-6501100-\$.DID. OR US-6502952-\$.DID. OR US-621184-\$.DID. OR US-6578998-\$.DID. OR US-6666565-\$.DID. OR US-6666565-\$.DID. OR US-6678998-\$.DID. OR US-62020149942-\$.DID. OR US-6666565-\$.DID. OR US-666665	US-PGPUB; USPAT	OR	ON	2009/11/23
S79	59	(LED and (limit with (solid near2 angle)))	US-PGPUB; USPAT	OR	ON	2009/12/06 11:19
S80	93	(diode and (limit with (solid near2 angle)))	US-PGPUB; USPAT	OR	ON	2009/12/06 11:23
S81	54	S80 not S79	US-PGPUB; USPAT	OR	ON	2009/12/06 11:23
S82	1	(diode and (limit with (solid near2 angle)))	DERWENT	OR	ON	2009/12/06 11:25
S83	24	(ledand (limit with (solid near2 angle)))	DERWENT	OR	ON	2009/12/06 11:25
S84	1	(led and (limit with (solid near2 angle)))	DERWENT	OR	ON	2009/12/06 11:25
S85	194	"20020084749" "5136483" "20030189830"	US-PGPUB; USPAT	OR	ON	2009/12/06 11:27
S86	2	"20020084749" "20030189830"	US-PGPUB; USPAT	OR	ON	2009/12/06 11:27
S87	192	"5136483"	US-PGPUB; USPAT	OR	ON	2009/12/06 11:28

S88	1	"5136483".pn.	US-PGPUB; USPAT	OR	ON	2009/12/06 11:28
S89	1	(led (light with diode)) and (improve same columnat\$3 same light)	US-PGPUB; USPAT	OR	ON	2009/12/06 11:36
S90	5	(led (light with diode)) and (improv \$3 same columnat\$3 same light)	US-PGPUB; USPAT	OR	ON	2009/12/06 11:36
S91	245	(led (light with diode)) and (columnat\$3 same light)	US-PGPUB; USPAT	OR	ON	2009/12/06 11:37
S92	12	US-1711478-\$.DID. OR US-3427447- \$.DID. OR US-3736427-\$.DID. OR US-3760237-\$.DID. OR US-4050775- \$.DID. OR US-4092705-\$.DID. OR US-4241382-\$.DID. OR US-4460939- \$.DID. OR US-4603496-\$.DID. OR US-4654758-\$.DID. OR US-4712163- \$.DID. OR US-4743094-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/12/06 11:48
S93	20	US-5998925-\$.DID. OR US-6155699- \$.DID. OR US-6161946-\$.DID. OR US-6204523-\$.DID. OR US-6236514- \$.DID. OR US-6255670-\$.DID. OR US-6294800-\$.DID. OR US-6332688- \$.DID. OR US-6357889-\$.DID. OR US-6404131-\$.DID. OR US- 20020149942-\$.DID. OR US- 6501100-\$.DID. OR US-6578998-\$. DID. OR US-6666565-\$.DID. OR US- 6502952-\$.DID. OR US-6132072-\$. DID. OR US-6441943-\$.DID. OR US- 20020149312-\$.DID. OR US- 6728393-\$.DID. OR US- 20040080938-\$.DID.	US-PGPUB; USPAT	OR	ON	2009/12/06 11:51
S94	22	US-1711478-\$.DID. OR US-3427447-\$.DID. OR US-3736427-\$.DID. OR US-3760237-\$.DID. OR US-4050775-\$.DID. OR US-4460939-\$.DID. OR US-4654758-\$.DID. OR US-4654758-\$.DID. OR US-4712163-\$.DID. OR US-4743094-\$.DID. OR US-4965488-\$.DID. OR US-5142387-\$.DID. OR US-5509095-\$.DID. OR US-5541746-\$.DID. OR US-5695277-\$.DID. OR US-5813752-\$.DID. OR US-5847507-\$.DID. OR US-5962971-\$.DID. OR US-5962971-\$.DID. OR	US-PGPUB; USPAT	OR	ON	2009/12/06 11:56
S95	302	(led (light with diode)) and (reflect \$3 same encapsul\$4) and (hemi \$spher\$3 semi\$spher\$3)	US-PGPUB; USPAT	OR	ON	2009/12/06 12:07
S96	306	362/33.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/14 15:04
S97	4995	"362".clas. and (LED solid adj state semiconductor diode) and (dome hemispher\$6 spher\$6 hemi\$spher\$6 semi\$spher\$6)	US-PGPUB; USPAT	OR	ON	2009/12/14 15:32

S99	3949	S97 and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 15:33
S100	3785	"362".clas. and (LED diode) and (dome hemispher\$6 spher\$6 hemi \$spher\$6 semi\$spher\$6) and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 15:34
S101	300	"362".clas. and (LED diode) and (encapsul\$5 seal\$3) with (dome hemispher\$6 spher\$6 hemi\$spher\$6 semi\$spher\$6) and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 15:38
S102	53	"362".clas. and (LED diode) and (encapsul\$5 seal\$3) with (reflect\$3 near3 coat\$3) and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 17:11
S103	22	"362".clas. and (collimat\$3 columnat \$3) and (encapsul\$5 seal\$3) with (reflect\$3 near3 coat\$3) and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 17:15
S104	39	("1676464"   "1764474"   "1964325"   "1992041"   "2006249"   "2058707"   "2216965"   "2224178"   "2254961"   "2279103"   "2352801"   "3110883"   "3184592"   "4115843").PN. OR ("4213171").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/14 17:17
S105	877	"362".clas. and (collimat\$3 columnat \$3) and (encapsul\$5 seal\$3) and (degree angle radian)	US-PGPUB; USPAT	OR	ON	2009/12/14 17:21
S106	474	"362".clas. and (collimat\$3 columnat \$3) and (encapsul\$5 seal\$3) and (degree angle radian) and (dome hemispher\$6 spher\$6 hemi\$spher\$6 semi\$spher\$6)	US-PGPUB; USPAT	OR	ON	2009/12/14 17:22
S107	19	("2238493"   "2307247"   "2566126"   "3221162"   "3253276"   "3329812"   "3731082"   "3833828"   "4115843"   "4142179"   "4504889").PN. OR ("4953062"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/14 17:24
S108	7	("20020139661"   "5418810"   "5654831"   "5673083"   "5774271"   "6191894"   "6654112").PN. OR ("7192153").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/14 17:35
S109	7	US-6601980-\$.DID. OR US-6565247- \$.DID. OR US-5678916-\$.DID. OR US-6575609-\$.DID. OR US- 20050036331-\$.DID. OR US- 5941633-\$.DID. OR US-6334701-\$. DID.	US-PGPUB; USPAT	OR	ON	2009/12/15 08:54
S110	20	"4587601"	US-PGPUB; USPAT	OR	ON	2009/12/15 08:55
S111	76	("4698730"   "4712163"   "4733335"   "4742432"   "5001609").PN. OR ("5122943"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 09:00

S112	1162	(LED diode) and (encapsulat\$3 seal \$3) and ((limit\$3 block\$3 reflect\$3) with light)	DERWENT	OR	ON	2009/12/15 09:02
S113	237	(LED diode) and (encapsulat\$3 seal \$3) and ((limit\$3 block\$3) with light)	DERWENT	OR	ON	2009/12/15 09:02
S114	36	(LED diode) and (encapsulat\$3 seal \$3) and ((limit\$3 block\$3 reflect\$3) with light) and (hemi\$spher\$6 semi \$spher\$6 dome\$1)	DERWENT	OR	ON	2009/12/15 09:16
S115	694	257/89.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 10:00
S116	1417	362/231.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 10:15
S117	1322	362/241,244,245,249.02.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 13:17
S118	1216	S117 not S116	US-PGPUB; USPAT	OR	ON	2009/12/15 13:17
S119	7	("4677533"   "5224733"   "5577832"   "5899557"   "6048083"   "6905228"). PN. OR ("7416312"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 14:28
S120	8	("20040084681"   "20050286145"   "6987613"   "7019334").PN. OR ("7182481").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 14:33
S121	32	("5128843"   "5604480"   "5632551"   "5966393").PN. OR ("6404131").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 14:53
S122	41	("1236137"   "1626615"   "1945190"   "1995816"   "2096952"   "2817070"   "3137449"   "4214168"   "4240063"   "4954822"   "5068771"   "5136287"   "5174649"   "5561346"   "5594433"   "5636057"   "5703719"   "5742120"   "5833355"   "5896093"   "D087501"   "D092641"   "D388726"). PN. OR ("6244727"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 14:58
S123	4608	257/98,100.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 15:13
S124	856	S123 and (reflect\$3 with coat\$3)	US-PGPUB; USPAT	OR	ON	2009/12/15 15:16
S125	594	S124 and (angle degree radian \$2". degree.")	US-PGPUB; USPAT	OR	ON	2009/12/15 15:17
S126	0	("7402842").URPN.	USPAT	OR	ON	2009/12/15 15:27

S127	24	("20030085416"   "20040184270"   "20050269695"   "4737236"   "5268310"   "5343070"   "5502317"   "5696466"   "5841184"   "5877037"   "5914501"   "5976941"   "6014064"   "6114716"   "6150197"   "6191048"   "6379785"   "6472688"   "6486499"   "6521914"   "6593598"   "6642072"   "6642550"   "6876008").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:27
S128	251	S123 and (cone with light)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:31
S129	1	"10283737"	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:39
S130	2	("2004/0080251"). URPN.	USPAT	OR	ON	2009/12/15 15:41
S131	64	"3877052" "3968564"	USPAT	OR	ON	2009/12/15 15:41
S132	50	S123 and (dome with reflect\$3)	USPAT	OR	ON	2009/12/15 15:49
S133	54	("20020030194"   "20020141006"   "20030227249"   "20030230757"   "20040051106"   "3769536"   "4391683"   "4675058"   "4689652"   "4815084"   "4983009"   "4988579"   "5040868"   "5055892"   "5130531"   "5132430"   "5255171"   "5317170"   "5336644"   "5376580"   "5418384"   "5502316"   "5528057"   "5553089"   "5606181"   "5698452"   "5724376"   "5779924"   "5793062"   "5837561"   "5875205"   "5898185"   "5917201"   "5925898"   "5966399"   "6015719"   "6075627"   "6091020"   "6091694"   "6155699"   "6165911"   "6214733"   "6233267"   "6258699"   "6412971"   "6429462"   "6469785"   "6483196"   "6495862"   "6598998"   "6784463"   "7053419").PN. OR ("7276737"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:52
S134	14	("3877052"   "3991339"   "4249967"   "4675058"   "4935665"   "6120909"   "6229160"   "6323063"   "6355946"). PN. OR ("6969946"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:53
S135	18	("3877052"   "3968564"   "6229160"   "6323063"). PN. OR ("6730940"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/15 15:53
S136	2	("2004/0080251"). URPN.	USPAT	OR	ON	2009/12/15 15:53
S137	76	S133 S134 S135 S136	USPAT	OR	ON	2009/12/15 15:54

S138	75	(S116 S117 S123) and ((spher\$3 semi\$spher\$3 hemi\$spher\$3 dome \$1) same (aperture opening))	USPAT	OR	ON	2009/12/15 16:01
S139	1793	313/512.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 16:06
S140	14	\$139 and ((spher\$3 semi\$spher\$3 hemi\$spher\$3 dome\$1) same (aperture opening))	USPAT	OR	ON	2009/12/15 16:07
S141	1793	313/512.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/15 16:07

## **EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L21		((LED (light with diode)) and (hemi \$spher\$6 semi\$spher\$6 dome\$1) and (degree radian)).clm.	USPAT; UPAD	OR	ON	2009/12/16 10:00
L22	262	313/114.ccls.	USPAT; UPAD	OR	ON	2009/12/16 10:20
L23	23	22 and ((light with diode) LED)	USPAT; UPAD	OR	ON	2009/12/16 10:20

## 12/16/2009 11:07:21 AM

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